



TECHNICAL SOLUTIONS
NORTH AMERICA

February 25, 2010
Via FedEx



Ms. Cheryl L. Newton, Director
Air and Radiation Division
United States Environmental Protection Agency
Region 5
77 W. Jackson Blvd.
Chicago, IL 60604-3590

RE: Veolia ES Technical Solutions, L.L.C.
Title V Permit #: V-IL-1716300103-08-01
Significant Modification

Ms Newton,

Veolia ES Technical Solutions, L.L.C. (Veolia), hereby submits for your review a Significant Modification to the Part 71 Permit Number V-IL-1716300103-08-01. This Significant Modification request revises the OPL's (feed rate limits) for Hg, SVM and LVM calculated from performance testing in August and September, 2008 that were previously submitted in a Significant Modification dated January 6, 2009.

On October 10, 2008, Veolia submitted a Significant Modification Request to revise the OPL's (feed rate limits) for mercury, SVM and LVM that were demonstrated during the above referenced testing be incorporated into the Part 71 permit. On January 6, 2009, Veolia submitted revised OPL's for mercury, SVM and LVM. Veolia had discovered that its metal feed rate calculations did not account for the moisture content of the solid waste. As a result, Veolia recalculated the OPL's for mercury, SVM and LVM. After subsequent conversations with the Agency, Veolia has again revised the OPL's for Hg, SVM and LVM taking into account the most conservative moisture values for the solids fed during testing, historical feed rates and capping the extrapolated value to three times the actual calculated feed rates.

The justification for and the revised tables defining these OPL's is attached.

Ms. Newton
February 25, 2010
Page 2

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted, is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Upon review of this submittal, should the Agency have a need for additional information or questions, please contact Dennis Warchol at (618) 271-2804 or via e-mail at dwarchol@onyxes.com or me at (618) 271-2804 or via e-mail at dharris@onyxes.com.

Sincerely,
Veolia ES Technical Solutions, L.L.C.


Doug Harris
General Manager

Att.

cc: Genevieve Damico, USEPA
USEPA File

Veolia ES Technical Solutions, L.L.C.
Significant Modification to Part 71 Permit
Title V Permit #: V-IL-1716300103-08-01

Pursuant to 40 CFR 71.7(e)(3), Veolia ES Technical Solutions, L.L.C. is submitting a significant modification to our Part 71 Permit number V-IL-1716300103-08-01. The following pages detail the requested modification, supporting information and justification for the modification. The requested modification is as follows:

- Section 2.1 (C)(2) Operating Parameter Limits for Units 2, 3 and 4 Mercury, SVM and LVM

Modification of operating parameter limit (OPL's) table in Section 2.1 (C)(2).

Pursuant to the Request to Provide Information Pursuant to the Clean Air Act dated June 5, 2008 and subsequently revised on September 12, 2008, attached is a revised Operating Parameter Limit (OPL's) table that reflects the mercury, SVM and LVM OPL's defined in 40 CFR 63.1209.

The OPL's were modified from the original significant modifications submitted on October 10, 2008 and January 6, 2009 to account for moisture content in the solid feeds, historical feed rates of these metals and capping the extrapolated rate at three times the actual tested feed rate.

Veolia has extrapolated metal feed rate limits for mercury, SVM and LVM. These feed rates were extrapolated using the protocol provided by USEPA (data sheets provided). However, based on the extremely high System Removal Efficiencies (SRE's) achieved during this testing, Veolia has lowered the extrapolated metal feed rates for SVM and LVM at Unit 4 to account for historical metal feed rate data as defined in 40 CFR 1209(n)(2)(ii)(B)(2).

In order for extrapolation to be utilized, Veolia conducted these performance tests using metal feedrates as defined in 40 CFR 1207 (f)(1)(x)(B), that were greater than "the historical of normal metals feed rates" fed to the units over the last four years. Veolia has provided to the Agency feed rate data for SVM, LVM and Mercury since July 1, 2004 to justify the above requirement. As is detailed, the metals fed to the incinerators during the performance test were higher than the historical range of normal metal feeds over the last four years.

As stated above, Veolia's extrapolated metal feed rates defined in the attached table used the extrapolated method defined in the Performance Test Plan as required by 40 CFR 1207 (f)(1)(x) (A) and given to Veolia by USEPA Region 5 as

an approved method, but also took into account historical metal feed rates for each unit in setting these extrapolated values, again as required by 40 CFR 1209 (n)(2)(ii)(B)(2). Veolia is requesting approval of these extrapolated feed rates not only because it followed the requirements of the Regulations but it has been the Agency's practice of permitting extrapolation with other Region 5 incinerators who in some cases were not required to follow 40 CFR 1207 (f)(1)(x) or 40 CFR 1209 (n)(2)(ii)(B)(2). Veolia has reviewed CPT plans (Project Number 07136-029-100 and Project Number 010302) from two other Region 5 incinerators and have found that both were allowed to extrapolate but did not provide all the information required in 40 CFR 1207 (f)(1)(x). It is also noted that in recent comments by the USEPA, Region 5 dated April 2, 2008 and signed by William MacDowell on one of these incinerator's CPT plans that the Agency acknowledges that the requirements for extrapolation were not raised in the approved 2003 plan and subsequent results that included extrapolation and "want to correct this oversight for the 2008 CPT." Veolia only details this to establish that a consistent pattern has not been used to approve or deny extrapolation but requests that Veolia's extrapolation be approved based on the merits of the test results and that the requirements for extrapolation have been complied with as defined in the MACT regulation.

Section 2.1(C)(2)

Permittee must operate Units 2, 3, and 4 under these operating parameter limits (OPL's) to demonstrate compliance with Subpart EEE.

| Operating Parameters | Unit #2 | Unit #3 | Unit #4 | AWFCO |
|---|---------|---------|---------|--------------------------------|
| Total Feedrate of mercury lbs/hr | 0.0057 | 0.070 | 0.219 | 12-hour rolling averages |
| Total Feedrate of semi-volatile metals lbs/hr | 189 | 193 | 191 | 12-hour rolling average limits |
| Total feedrate of low volatile metals lbs/hr | 140 | 143 | 151 | 12-hour rolling average limits |
| | | | | |

| USEPA Approved Extrapolation Method (PSC H2O) | | | | | | | | | |
|---|-----|----------------------|-------------------|---------------------|----------------------|---------------------|----------------------|--------------------|----------------------|
| [Maximum extrap. value 3 times feed) | | | | | | | | | |
| | | | | | Total LVM Emis. | | Total SVM Emis. | | Hg Emis. |
| | | Stackflow (dscfm) | Oxygen (% dry) | LVM Feed (lb/hr) | Rate (ER) (lb/hr) | SVM Feed (lb/hr) | Rate (ER) (lb/hr) | Hg Feed (lb/hr) | Rate (ER) (lb/hr) |
| Test Data | Run | | | | | | | | |
| Unit 2 (8/08) | 1 | 5496 | 11.72 | | | | | 0.0023 | 0.000791 |
| | 2 | 5572 | 11.54 | | | | | 0.0017 | 0.000822 |
| | 3 | 5357 | 11.3 | | | | | 0.0016 | 0.000799 |
| Unit 2 (9/08) | 1 | 4698 | 11.21 | 46.82 | 0.000125 | 62.06 | 0.000398 | | |
| | 2 | 5099 | 10.91 | 46.52 | 0.0000438 | 63.46 | 0.000144 | | |
| | 3 | 5248 | 11.35 | 47.17 | 0.000101 | 63.27 | 0.000364 | | |
| Unit 3 (8/08) | 1 | 5665 | 11.99 | 47.71 | 0.000388 | 64.07 | 0.000799 | 0.0016 | 0.000748 |
| | 2 | 5719 | 10.96 | 47.31 | 0.000308 | 65 | 0.00103 | 0.0022 | 0.000938 |
| | 3 | 5890 | 11.98 | 48.01 | 0.00022 | 63.78 | 0.000655 | 0.0018 | 0.000818 |
| Unit 4 (8/08) | 1 | 17280 | 12.27 | 50.61 | 0.000214 | 63.51 | 0.0009 | 0.0257 | 0.00153 |
| | 2 | 17255 | 12.13 | 50.65 | 0.000425 | 63.45 | 0.0013 | 0.026 | 0.000996 |
| | 3 | 17189 | 11.63 | 49.79 | 0.000586 | 64.01 | 0.00116 | 0.0264 | 0.00108 |

| Extrapolation Request Summary | | | | | | |
|-------------------------------|--------------|---------------------------------|------------|-------------------------|------------|---------------------|
| | | 2008 Sig. Mod. | 2008 Metal | 2010 Sig. Mod. | 2010 Metal | |
| Unit | Metals Group | Extrap. Value Requested (lb/hr) | Feed Basis | Extrap. Value Requested | Feed Basis | 12 Hour Max (lb/hr) |
| 2 | LVM | 399 | 47 | 140 | 47 | 84 |
| 2 | SVM | 459 | 63 | 189 | 63 | 91 |
| 2 | Hg | 0.017 | 0.0047 | 0.0057 | 0.0019 | 0.0055 |
| 3 | LVM | 399 | 51 | 143 | 48 | 77 |
| 3 | SVM | 459 | 65 | 193 | 64 | 82 |
| 3 | Hg | 0.017 | 0.0051 | 0.0057 | 0.0019 | 0.0054 |
| 4 | LVM | 500 | 55 | 151 | 50 | 77 |
| 4 | SVM | 500 | 65 | 191 | 64 | 58 |
| 4 | Hg | 0.257 | 0.030 | 0.078 | 0.026 | 0.060 |

[Maximum extrap. value 3 times feed)

| | | |
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| | | |

| | | | | | | | | |
|---------------------------------|---|---------------------------|------------------------|----------------|--------------------------|--------------------------|-----|--|
| | [1] | [2] | [3] | [4] | Proposed | Proposed | | |
| Unit 2 (LVM) | Removal | | Max. ER at 75% | LVM Feedrate | Extrapolation | Extrapolation | | |
| Em. Std.: 92 ug/dscm (9/08) | Efficiency (RE) (%) | Stackflow (dscfm,7%O2) | of Standard (lb/hr) | OPL (lb/hr) | Limit (Total) (lb/hr) | Limit (Pump.) (lb/hr) | | |
| | | | | | | | | |
| | 1 | 99.99973 | 6718 | 0.001734 | 649 | | | |
| | 2 | 99.99991 | 7075 | 0.001826 | 1939 | | | |
| | 3 | 99.99979 | 7614 | 0.001965 | 918 | | | |
| | Avg | 99.99981 | 7136 | 0.001841 | 1169 | 140 | 140 | |
| | | | | | | | | |
| | | | | | | | | |
| | [1] | [2] | [3] | [4] | Proposed | | | |
| Unit 2 (SVM) | Removal | | Max. ER at 75% | SVM Feedrate | Extrapolation | | | |
| Em. Std.: 230 ug/dscm (9/08) | Efficiency (RE) (%) | Stackflow (dscfm,7%O2) | of Standard (lb/hr) | OPL (lb/hr) | Limit (lb/hr) | | | |
| | | | | | | | | |
| | 1 | 99.99936 | 6718 | 0.004334 | 676 | | | |
| | 2 | 99.99977 | 7075 | 0.004564 | 2012 | | | |
| | 3 | 99.99942 | 7614 | 0.004912 | 854 | | | |
| | Avg | 99.99952 | 7136 | 0.004604 | 1180 | 189 | | |
| | | | | | | | | |
| | | | | | | | | |
| | [1] | [2] | [3] | [4] | Proposed | | | |
| Unit 2 (Hg) | Removal | | Max. ER at 75% | Hg Feedrate | Extrapolation | | | |
| Em. Std.: 130 ug/dscm (8/08) | Efficiency (RE) (%) | Stackflow (dscfm,7%O2) | of Standard (lb/hr) | OPL (lb/hr) | Limit (lb/hr) | | | |
| | | | | | | | | |
| | 1 | 65.61 | 8291 | 0.003024 | 0.0088 | | | |
| | 2 | 51.65 | 8246 | 0.003007 | 0.0062 | | | |
| | 3 | 50.06 | 7732 | 0.002819 | 0.0056 | | | |
| | Avg | 55.77 | 8090 | 0.002950 | 0.0069 | 0.0057 | | |
| | | | | | | | | |
| | Extrapolated metals feedrates calculated using USEPA approved method. | | | | | | | |
| | | | | | | | | |

| USEPA Approved Extrapolation Method (PSC H2O) | | | | | | | |
|---|-----|-----------------|--------------|----------------|--------------|---------------|---------------|
| [Maximum extrap. value 3 times feed] | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | [1] | [2] | [3] | [4] | Proposed | Proposed |
| Unit 3 (LVM) | | Removal | | Max. ER at 75% | LVM Feedrate | Extrapolation | Extrapolation |
| Em. Std.: 92 ug/dscm | | Efficiency (RE) | Stackflow | of Standard | OPL | Limit | Limit (Pump.) |
| | | (%) | (dscfm,7%O2) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) |
| | | | | | | | |
| | 1 | 99.99919 | 8802 | 0.002272 | 279 | | |
| | 2 | 99.99935 | 7975 | 0.002058 | 316 | | |
| | 3 | 99.99954 | 9142 | 0.002359 | 515 | | |
| | Avg | 99.99936 | 8640 | 0.002230 | 370 | 143 | 143 |
| | | | | | | | |
| | | | | | | | |
| | | [1] | [2] | [3] | [4] | Proposed | |
| Unit 3 (SVM) | | Removal | | Max. ER at 75% | SVM Feedrate | Extrapolation | |
| Em. Std.: 230 ug/dscm | | Efficiency (RE) | Stackflow | of Standard | OPL | Limit | |
| | | (%) | (dscfm,7%O2) | (lb/hr) | (lb/hr) | (lb/hr) | |
| | | | | | | | |
| | 1 | 99.99875 | 8802 | 0.005679 | 455 | | |
| | 2 | 99.99842 | 7975 | 0.005145 | 325 | | |
| | 3 | 99.99897 | 9142 | 0.005898 | 574 | | |
| | Avg | 99.99871 | 8640 | 0.005574 | 451 | 193 | |
| | | | | | | | |
| | | | | | | | |
| | | [1] | [2] | [3] | [4] | Proposed | |
| Unit 3 (Hg) | | Removal | | Max. ER at 75% | Hg Feedrate | Extrapolation | |
| Em. Std.: 130 ug/dscm | | Efficiency (RE) | Stackflow | of Standard | OPL | Limit | |
| | | (%) | (dscfm,7%O2) | (lb/hr) | (lb/hr) | (lb/hr) | |
| | | | | | | | |
| | 1 | 53.25 | 8802 | 0.003210 | 0.0069 | | |
| | 2 | 57.36 | 7975 | 0.002908 | 0.0068 | | |
| | 3 | 54.56 | 9142 | 0.003334 | 0.0073 | | |
| | Avg | 55.06 | 8640 | 0.003151 | 0.0070 | 0.0057 | |
| | | | | | | | |
| Extrapolated metals feedrates calculated using USEPA approved method. | | | | | | | |
| | | | | | | | |

[illegible]

| | | [1] | [2] | [3] | [4] | Proposed | Proposed | | |
|---|-----|-----------------|--------------|----------------|--------------|---------------|---------------|--|--|
| Unit 3 (LVM) | | Removal | | Max. ER at 75% | LVM Feedrate | Extrapolation | Extrapolation | | |
| Em. Std.: 92 ug/dscm | | Efficiency (RE) | Stackflow | of Standard | OPL | Limit | Limit (Pump.) | | |
| | | (%) | (dscfm,7%O2) | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) | | |
| | | | | | | | | | |
| | 1 | 99.99919 | 8802 | 0.002272 | 279 | | | | |
| | 2 | 99.99935 | 7975 | 0.002058 | 316 | | | | |
| | 3 | 99.99954 | 9142 | 0.002359 | 515 | | | | |
| | Avg | 99.99936 | 8640 | 0.002230 | 370 | 143 | 143 | | |
| | | | | | | | | | |
| | | | | | | | | | |
| Unit 3 (SVM) | | Removal | [2] | [3] | [4] | Proposed | | | |
| Em. Std.: 230 ug/dscm | | Efficiency (RE) | Stackflow | Max. ER at 75% | SVM Feedrate | Extrapolation | | | |
| | | (%) | (dscfm,7%O2) | of Standard | OPL | Limit | | | |
| | | | | (lb/hr) | (lb/hr) | (lb/hr) | | | |
| | | | | | | | | | |
| | 1 | 99.99875 | 8802 | 0.005679 | 455 | | | | |
| | 2 | 99.99842 | 7975 | 0.005145 | 325 | | | | |
| | 3 | 99.99897 | 9142 | 0.005898 | 574 | | | | |
| | Avg | 99.99871 | 8640 | 0.005574 | 451 | 193 | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| Unit 3 (Hg) | | [1] | [2] | [3] | [4] | Proposed | | | |
| Em. Std.: 130 ug/dscm | | Removal | | Max. ER at 75% | Hg Feedrate | Extrapolation | | | |
| | | Efficiency (RE) | Stackflow | of Standard | OPL | Limit | | | |
| | | (%) | (dscfm,7%O2) | (lb/hr) | (lb/hr) | (lb/hr) | | | |
| | | | | | | | | | |
| | 1 | 53.25 | 8802 | 0.003210 | 0.0069 | | | | |
| | 2 | 57.36 | 7975 | 0.002908 | 0.0068 | | | | |
| | 3 | 54.56 | 9142 | 0.003334 | 0.0073 | | | | |
| | Avg | 55.06 | 8640 | 0.003151 | 0.0070 | 0.0057 | | | |
| | | | | | | | | | |
| Extrapolated metals feedrates calculated using USEPA approved method. | | | | | | | | | |

| USEPA Approved Extrapolation Method (PSC H2O) | | | | | | | |
|---|---|------------------------|---------------------|-----------------------|---------------------|----------------------|----------------------|
| [Maximum extrap. value 3 times feed) | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| Unit 4 (LVM) | | [1] | [2] | [3] | [4] | Proposed | Proposed |
| Em. Std.: 92 ug/dscm | | Removal | Stackflow | Max. ER at 75% | LVM Feedrate | Extrapolation | Extrapolation |
| | | Efficiency (RE) | (dscfm,7%O2) | of Standard | OPL | Limit | Limit (Pump.) |
| | | (%) | | (lb/hr) | (lb/hr) | (lb/hr) | (lb/hr) |
| | | | | | | | |
| | 1 | 99.99958 | 27711 | 0.007151 | 1691 | | |
| | 2 | 99.99916 | 27234 | 0.007028 | 838 | | |
| | 3 | 99.99882 | 25683 | 0.006628 | 563 | | |
| | Avg | 99.99919 | 26876 | 0.006936 | 1031 | 151 | 151 |
| | | | | | | | |
| | | | | | | | |
| Unit 4 (SVM) | | [1] | [2] | [3] | [4] | Proposed | |
| Em. Std.: 230 ug/dscm | | Removal | Stackflow | Max. ER at 75% | SVM Feedrate | Extrapolation | |
| | | Efficiency (RE) | (dscfm,7%O2) | of Standard | OPL | Limit | |
| | | (%) | | (lb/hr) | (lb/hr) | (lb/hr) | |
| | | | | | | | |
| | 1 | 99.99858 | 27711 | 0.017878 | 1262 | | |
| | 2 | 99.99795 | 27234 | 0.017571 | 858 | | |
| | 3 | 99.99819 | 25683 | 0.016570 | 914 | | |
| | Avg | 99.99824 | 26876 | 0.017340 | 1011 | 191 | |
| | | | | | | | |
| | | | | | | | |
| Unit 4 (Hg) | | [1] | [2] | [3] | [4] | Proposed | |
| Em. Std.: 130 ug/dscm | | Removal | Stackflow | Max. ER at 75% | Hg Feedrate | Extrapolation | |
| | | Efficiency (RE) | (dscfm,7%O2) | of Standard | OPL | Limit | |
| | | (%) | | (lb/hr) | (lb/hr) | (lb/hr) | |
| | | | | | | | |
| | 1 | 94.05 | 27711 | 0.010105 | 0.170 | | |
| | 2 | 96.17 | 27234 | 0.009931 | 0.259 | | |
| | 3 | 95.91 | 25683 | 0.009365 | 0.229 | | |
| | Avg | 95.38 | 26876 | 0.009801 | 0.219 | 0.078 | |
| | | | | | | | |
| | Extrapolated metals feedrates calculated using USEPA approved method. | | | | | | |
| | | | | | | | |



TECHNICAL SOLUTIONS
NORTH AMERICA

May 12, 2010
Via FedEx

RECEIVED
MAY 14 2010

Ms. Cheryl L. Newton, Director
Air and Radiation Division
United States Environmental Protection Agency
Region 5
77 W. Jackson Blvd.
Chicago, IL 60604-3590

RE: Veolia ES Technical Solutions, L.L.C.
Title V Permit #: V-IL-1716300103-08-01
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Ms Newton,

Veolia ES Technical Solutions, L.L.C. (Veolia) submitted a Significant Modification Request to our Part 71 Title V Permit on October 10, 2008, to revise the OPL's (feed rate limits) for mercury, SVM and LVM that were demonstrated during metals testing conducted in August and September, 2008. On January 6, 2009, Veolia submitted revised OPL's for mercury, SVM and LVM. Veolia had discovered that its metal feed rate calculations did not account for the moisture content of the solid waste. As a result, Veolia recalculated the OPL's for mercury, SVM and LVM. After subsequent conversations with the Agency, Veolia, on February 25, 2010, again submitted revised OPL's for Hg, SVM and LVM taking into account the most conservative moisture values for the solids fed during testing, historical feed rates and capping the extrapolated value to three times the actual calculated feed rates.

Due to the significant changes made to the original October 10, 2008 and the January 6, 2009 Part 71 Significant Modifications, Veolia is withdrawing those modification requests. In lieu of those submittals, Veolia submitted a Significant Modification on February 25, 2010 that should act as the modification of record.

Ms. Newton
May 11, 2010
Page 2

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted, is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Upon review of this submittal, should the Agency have a need for additional information or questions, please contact Dennis Warchol at (618) 271-2804 or via e-mail at dwarchol@onyxes.com or me at (618) 271-2804 or via e-mail at dharris@onyxes.com.

Sincerely,
Veolia ES Technical Solutions, L.L.C.


Doug Harris
General Manager

Att.

cc: Genevieve Damico, USEPA
USEPA File